

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An apparatus for reversing flow of inspiratory gas ~~within~~ through a unilimb breathing circuit for humidification of the inspiratory gas, said apparatus comprising:

a reverse flow adapter, said reverse flow adapter adapted to be coupled to the unilimb breathing circuit for permitting the inspiratory gas to travel within flow through an outer tube of the unilimb breathing circuit for interaction with and humidification by condensed moisture disposed therewithin, and wherein for permitting patient expired gases to travel flow through an inner tube of the unilimb breathing circuit ~~for exiting and exit~~ through an aperture formed in said reverse flow adapter.

2. (Cancel)

3. (Cancel)

4. (Cancel)

5. (New) An apparatus for reversing flow of inspiratory gas through a unilimb breathing circuit for humidification of the inspiratory gas, said apparatus comprising:

a reverse flow adapter comprising a venting aperture, said reverse flow adapter adapted to be coupled to an inner tube and an outer tube of the unilimb breathing circuit, wherein the inspiratory gas flows through said reverse flow adapter and subsequently through the outer tube of the unilimb

breathing circuit, and wherein said venting aperture is in fluid communication with the inner tube of the unilimb breathing circuit.

6. (New) The apparatus of Claim 5, wherein the outer tube is coaxially disposed about the inner tube of the unilimb breathing circuit.

7. (New) The apparatus of Claim 5, wherein the outer tube retains moisture deposited therein via condensation of moisture from patient expiratory gases.

8. (New) The apparatus of Claim 7, wherein said reverse flow adapter is adapted to be coupled to a conventional inspiratory gas source.

9. (New) The apparatus of Claim 8, wherein inspiratory gas flows from the conventional inspiratory gas source, through said reverse flow adapter, through the outer tube, and subsequently interacts with and is humidified by said moisture condensed within the outer tube, thereby creating a humidified inspiratory gas for patient inhalation.

10. (New) The apparatus of Claim 9, wherein a face tent coupled to the outer tube is worn by the patient during inhalation of said humidified inspiratory gas.

11. (New) The apparatus of Claim 10, wherein patient exhaled gas flows through the inner tube of the unilimb breathing circuit, through said reverse flow adapter, and exits from said venting aperture of said reverse flow adapter.

12. (New) The apparatus of Claim 7, wherein said moisture is deposited within the unilimb breathing circuit via condensation of patient expiratory gases released or expelled by a sedated patient undergoing a medical procedure requiring administration of anesthesia or other inspiratory gases to the patient during performance of the medical procedure.

13. (New) The apparatus of Claim 12, wherein the unilimb breathing circuit utilized to administer anesthesia or other inspiratory gases to the patient during performance of the medical procedure is thereafter utilized to convey and humidify subsequently administered oxygen gas or other inspiratory gas delivered to the patient recovering from sedative effects of the inspiratory gases administered during performance of the medical procedure, the subsequently administered gas humidified via said moisture accumulated within the outer tube of the unilimb breathing circuit via condensation of the patient expiratory gases previously released by the sedated patient.

14. (New) The apparatus of Claim 5, wherein the unilimb breathing circuit is equipped with a coaxial filter in fluid communication with the outer tube and the inner tube.

15. (New) The apparatus of Claim 5, further comprising a flow diluter.

16. (New) The apparatus of Claim 5, further comprising an intermediate adapter dimensioned to engage said reverse flow adapter, said intermediate adapter comprising a nipple, said nipple comprising a passageway formed therethrough for the exit of inspiratory gases therefrom, wherein said nipple is dimensioned to be received by a connector formed on a nasal cannula assembly or a simple facemask assembly.

17. (New) An apparatus for reversing flow of inspiratory gas through a unilimb breathing circuit for humidification of the inspiratory gas, said apparatus comprising:

a reverse flow adapter comprising a venting aperture, said reverse flow adapter adapted to be coupled to the unilimb breathing circuit.

18. (New) The apparatus of Claim 17, wherein said reverse flow adapter comprises an inlet, said venting aperture formed through said inlet, and wherein said inlet further comprises a flow aperture for permitting inspiratory gases flowing from a central inspiratory gas source to flow therethrough and pass through said inlet.

19. (New) The apparatus of Claim 20, wherein said inlet is adapted to be coupled to an outer expiratory tube of the unilimb breathing circuit, resulting in said flow aperture being in fluid communication with an inner space of the outer expiratory tube, and wherein said venting aperture is in fluid communication with an inner space of an inner inspiratory tube of the unilimb breathing circuit.

20. (New) The apparatus of Claim 19, wherein inspiratory gases flowing from a central inspiratory gas source flow through said flow aperture of said reverse flow adapter, into said inlet of said reverse flow adapter, and through the inner space of the outer expiratory tube.

21. (New) The apparatus of Claim 20, wherein the inspiratory gases flowing through the outer expiratory tube interact with and are humidified by moisture from condensed expiratory gases deposited therein during a patient's prior exhalation, thereby creating a humidified inspiratory gas for patient inhalation.

22. (New) The apparatus of Claim 21, wherein patient exhaled gas flows through the inner inspiratory tube of the unilimb breathing circuit and exits from said venting aperture of said reverse flow adapter.

23. (New) A method of reversing flow of gas through a unilimb breathing circuit and subsequently humidifying the gas, said method comprising the steps of:

- a. coupling a reverse flow adapter to an outer expiratory tube of the unilimb breathing circuit;
- b. directing a stream of gas through the outer expiratory tube via said reverse flow adapter;
- c. humidifying the stream of gas with condensed moisture disposed within the outer expiratory tube; and,
- d. permitting patient expired gases to travel through an inner inspiratory tube of the unilimb breathing circuit for exiting through an aperture formed in said reverse flow adapter.